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## On the History of the Concept of « Analogy ». The Greek-Latin Antiquity

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### Abstract

*Analogy is one of the very few phenomena which raises interest for a large number of sciences due to the fact that we are confronted with a very complex reality that has multiple and heterogeneous facets, with profound implications for human thought and knowledge (and thus, to the human understanding through language). The paper aims at tracing back the history of the concept of « analogy » within the Greek-Latin Antiquity, analyzing namely its role attributed by some ancient thinkers, philosophers and grammarians concerned with language functioning and organization. We paid a special attention to the famous controversy, held around the middle of the second century BC, between the Analogists and Anomalists, the subject of the dispute being to what extent language conforms to some rules or it is dominated by irregularities, 'anomalies'.*

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### 1. Introduction

Analogy is one of the very few phenomena which raises interest for a very large number of sciences due to the fact that we are confronted with a very complex reality that has multiple and heterogeneous facets, with profound implications for human thought and knowledge (and thus, to the human understanding through language). Furthermore, the phenomenon has been defined or represented an interesting issue for numerous sciences and fields of study, not only for linguists but also for mathematicians, logicians, philosophers, psychologists, etc. We could say that the term *analogy* had and still has two fundamental meanings. In the narrow sense, this term was used first in mathematics, where analogy is understood as a proportion, i.e. equal ratios (as we find it for the first time in Pythagorean mathematics and Euclidean geometry).

In the teaching school tradition, the so-called "rule of three" or "the rule of the fourth proportional" is an example of analogy par excellence, and the vocabulary of this proportion mechanism, with all its equalities and reports is best revealed here. The theoretical bases of these "rules" are:

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Definition 1: Two quantities that depend on each other are called proportional if they meet the following conditions: a) if one increases, the other one also increases, b) if one increases by  $n$  times, then the other one increases by the same number of times.

Theorem 1: The ratio of the two values of one of the quantities is equal to the ratio of the values corresponding to the other size.

Definition 2: Two quantities that depend on each other are called inversely proportional if they meet the following criteria: a) if one increases, the other decreases, b) if one increases by  $n$  times, then the other decreases by  $n$  times.

Theorem 2: if we consider two inversely proportional sizes, the ratio of the two values of one of the quantities is equal to the inversed ratio of the corresponding values of the other quantity.

Schematically, the rule is as follows:  $\frac{a}{c} = \frac{b}{x}$ ,  $x = \frac{b \cdot c}{a}$

In a broader sense, analogy expresses the idea of similarity, which implies at the same time the existence of the common features and differences. The last mentioned use is found especially in modern philosophy (with Fr. Bacon, John Locke and J.S. Mill).

The linguistic use of the term *analogy* is, to some extent, as shown by the dictionary definitions, a middle way between the two different significances.

In the *Dictionary of the Romanian Language* (AD), Bucharest, 1913-1948, tome I. s.v. *analogy* we find the following definition: "f.n. report, partial « likeness » between two or more things, circumstances, situations, etc., the « matching » of size, shape, composition etc. between two things, which are actually opposite. (Gram.) The matching of a word or construction with another one with whom it is connected in form or meaning" (our translation) [1].

In *Petite Robert*, 1990, *analogy* is defined as „l<sup>0</sup> Ressemblance établie par l’imagination (souvent consacrée dans le langage par les divers acception d’une même mot) entre deux ou plusieurs objets de pensée essentiellement différents. (Lingv.) Action assimilatrice qui fait que certains formes changent sous l’influence d’autres formes auxquelles elle sont associées dans l’esprit et que détermine des créations conformes a des modèles préexistant”; and in *Webster*, 1997 s.v. *analogy*: „1. Partial similarity between like features of two things, on which a comparison may be based; 2. Agreement, similarity; 3. (biol.) An analogous relationship (corresponding in function, but not evolved from corresponding organs); 4. (ling) a. The process by which words or phrases are created or re-formed according to existing patterns in the language; b. A form resulting from such a process; 5. (logic) A form of reasoning in which one thing is inferred to be similar to another thing in a certain respect, on the basis of the known similarity between the things in other respects”.

If the reference to analogy within the linguistic disciplines was generally made with a certain consistency along the time, however, its explicit mention was sometimes eluded or concealed under other names (that is many linguists have used analogy without calling it as such). Therefore, it seems that a distinction between implicit usage and explicit mention is useful in our attempt to sketch a history of the concept of "analogy". Secondly, we would like to state the fact, as it will be seen henceforth, that ever since ancient times analogy has been defined in very clear terms that, but the subsequent development of the meaning with which the term was used in various works has led to a distortion of its original meaning, which, in fact, has only extended the scope of this concept.

What makes it difficult for a presentation of the avatars experienced by the notion of "analogy" is the relative lack of balance in the given interpretations. Basically, those who expressed their opinions on the effects of analogy on the language evolution have often had contradictory opinions. Thus, in the history of linguistics, analogy was entrusted either with a fundamentally negative role (as a factor disturbing the laws of evolution), or, conversely,

with the positive role of a regularizing and leveling factor. As a result of these discussions, the term itself has presently acquired polar, positive or negative connotations.

In what follows, we will refer to the tradition of the ancient Greek and Roman world, as far as of the analogy issue is concerned.

## 2. The Greek antiquity: from geometry to philosophy and from philosophy to grammar

The concept of « analogy » was initially used in mathematics, more specifically in the plane geometry studies in order to designate an identity of proportions, relations between terms. Moreover, in Greek, αναλόγον (gr. ανα- "again", λόγος, λόγία "word, speech, judgment, relation, connection") is even found with the meaning of "ratio, proportion". In the Pythagorean School, the term *analogy* designated a proportion be it arithmetic or geometric or harmonic:

„Une proportion est *arithmétique* quand le premier terme excède le second, autant que le second excède le troisième ( $a-b = b-c$ ), *géométrique* quand le premier se rapporte au second comme le second au troisième ( $a/b = c/d$ ), *harmonique* quand le premier excède le second par une partie de lui-même, et le second le troisième par le même partie ( $a-b = a/x$ ,  $b-c = c/x$ )” [2].

This is the meaning attributed by Euclid, who in *Elements*, Book V and VII, deals, among other things, with the proportional similarities between two or more numbers. Book V will be one of the peak points of mathematics. It is said that it was not really assimilated and exceeded barely a hundred years ago. It deals with the concept of « ratio », which is included in the following abstract definitions:

"3. A *ratio* is a sort of relation in respect of size between two magnitudes of the same kind 4. Magnitudes are said to *have a ratio* to one another which can, when multiplied, exceed one another. 5. Magnitudes are said to be *in the same ratio*, the first to the second and the third to the fourth, when, if any equimultiples whatever are taken of the first and third, and any equimultiples whatever of the second and fourth, the former equimultiples alike exceed, are alike equal to, or alike fall short of, the latter equimultiples respectively taken in corresponding order. 6. Let magnitudes which have the same ratio be called *proportional*. 7. When, of the equimultiples, the multiple of the first magnitude exceeds the multiple of the second, but the multiple of the third does not exceed the multiple of the fourth, then the first is said to have a *greater ratio* to the second than the third has to the fourth” [3].

In an era in which the whole science was reserved to philosophers, it is not at all surprising to encounter the mathematical notion of *analogy* in the argumentative discourse of some thinkers.

He who first used the term *analogy* in a proper philosophical acceptance will be Plato, who in his dialogues (especially *Gorgias*, *Timaeus* and *The Republic*) resorts to analogy in order to facilitate the understanding of some complex problems, such as the relationships between the different types of knowledge or spheres of reality, or to express the similarities between the functions of two different things.

In *Gorgias*, the dialogue involves both the nature of the rhetoric and the benefits it claims to offer. Due to its political and moral stakes, rhetoric competes with philosophy. In his intransigent criticism against the art of oratory, Socrates uses reasoning by means of analogy, showing that rhetoric should not be situated between arts and sciences, but among the occupations that aim at "flattery" or producing delight and gratification to the crowd, such as, "attiring ", "cooking" and "sophistry". These would endanger the true sciences and arts, such as medicine, gymnastics or politics (with its two aspects: legislation and justice):

**"Socrates** And now I will endeavour to explain to you more clearly what I mean: The soul and body being two, have two arts corresponding to them: there is the art of politics attending on the soul; and another art attending on the body, of which I know no single name, but which may be described as having two divisions, one of them gymnastic, and the other medicine. And in politics there is a legislative part, which answers to gymnastic, as justice does to medicine; and the two parts run into one another, justice having to do with the same subject as legislation, and medicine with the same subject as gymnastic, but with a difference [...]. Cookery, then, I maintain to be a flattery which takes the form of medicine; and tiring, in like manner, is a flattery which takes the form of gymnastic, and is knavish, false, ignoble, illiberal, working deceitfully by the help of lines, and colours, and enamels, and garments, and making men affect a spurious beauty to the neglect of the true beauty which is given by gymnastic. I would rather not be tedious, and therefore I will only say, after the manner of the geometricians (for I think that by this time you will be able to follow):

as tiring : gymnastic :: cookery : medicine;  
                   or rather,  
 as tiring : gymnastic :: sophistry : legislation;  
                   and  
 as cookery : medicine :: rhetoric : justice" [4].

Speaking, in *The Republic*, about the "Absolute Good", the great philosopher does not define Good directly, but uses an analogy: what is the sun to the surrounding world in relation to perception and the objects of perception, so is the Good to the world of ideas and objects connected to this idea. The Sun is the source of light and Good is the source of truth and knowledge. Sun is not the same as light, as well as Good is not the same as truth and knowledge. Both the Sun and the Good outweigh the effects they produce<sup>1</sup>.

The analogical principle will be increasingly used in the allegories of The Cave, The Sun and The Divided Line, real "focus points" of this method which, in fact, is present everywhere in this work. Thus, besides the analogy with Sun, "the child of the Good", we have the analogy with Line divided into four divisions (the four forms of knowledge that correspond to the four levels of being), the analogy with Cave (philosophy "makes the soul return" to the contemplation of the Good, but after having contemplated enough, the philosopher must "go back into the cave" in order to rule the city) or fundamental analogy between the individual's soul and the City, the State, as well as between the characterological constitution of the first and the political constitution – "Politeia" – of the second (man, his soul, is like a fortress in that it can be like this: free or subject to bondage) [5].

In the dialogue called *Timaeus*, Plato, following in the footsteps of the Pythagoreans, sets up a coherent system of explaining the world: for him, the Universe is created by the participation of four bodies to which correspond the essential elements: earth, fire, air and water; out of the earth, to be solid (the cube); out of fire, to be observable (tetrahedron); out of water (icosahedron) and out of air (octahedron), so that there should be a harmony as a result of proportion. Chaos was a part of the universe where reasoning was missing, where the elements had no ratio and individualized, they were floating – already made up – in firmness, but the whole did not yet take any shape. The one who starts the order of the world is the Demiurge. By the correspondence between objects and elements that he initiated, gave an impetus to order, making the elements become participating because he gave them shape and ordered them by using numbers. Plato seeks the connecting relation of the elements that cause so much harmony in Universe and he finds it in what is called the golden section which represents the basis for the "Divine Proportion":

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<sup>1</sup> This type of reasoning has become the starting point for the theory of God's knowledge by means of analogy. The concept according to which the Good represents a source that produces effects which, on the one hand, are identical, and, on the other hand, are different, is found in the Neoplatonic theory of emanation, which refers to the relationship between God and His creation

“God placed water and air in the mean between fire and earth, and made them to have the same proportion so far as was possible (as fire is to air so is air to water, and as air is to water so is water to earth); and thus he bound and put together a visible and tangible heaven. And for these reasons, and out of such elements which are in number four, the body of the world was created, and it was harmonised by proportion, and therefore has the spirit of friendship; and having been reconciled to itself, it was indissoluble by the hand of any other than the framer” [6].

This reasoning makes him emphasize the perfect forms of geometry: both the forms and the geometric reasoning connect the material world (human beings and objects) and the divine essence of ideas. Among other things, he says that the soul covered the body from all sides, within a circle and radiates from the centre. If the soul movement has been deciphered, then the Universe, in its movement, follows the same laws; we look in the mirror and conclude: man and the creature of the other beings have as a model (full of perfection) the Universe which is in harmony with the Soul of the World. The Human Soul (the microcosm) is analogous to that of the Universe (macrocosm):

“Such was the whole plan of the eternal God about the god that was to be, to whom for this reason he gave a body, smooth and even, having a surface in every direction equidistant from the centre, a body entire and perfect, and formed out of perfect bodies. And in the centre he put the soul, which he diffused throughout the body, making it also to be the exterior environment of it; and he made the universe a circle moving in a circle, one and solitary, yet by reason of its excellence able to converse with itself, and needing no other friendship or acquaintance. Having these purposes in view he created the world a blessed god” [7].

Analogy or proportion will be henceforth involved in the field of logical reasoning as a heuristic means of argumentation, a type of textual figure used in the philosophical language [8]<sup>2</sup>.

The comparison in the form of an analogy or proportion can be found – with a rhetorical function – in numerous lyric and epic poems written by the ancient Greek authors. It is used, for example, in Empedocle’s cosmogonic poem *Peri physeos* (On Nature), dedicated to the evolution of the material world, from its elementary forms to the making of the Universe and the birth of the living beings, or in Heraclitus’s fragmentarily preserved work also entitled *Peri physeos*<sup>3</sup>

But he who will extend the methodological and practical field of application of analogy, by attributing new functions to, it will be Aristotle, who as a logician showed much interest in analogical processes. The Stagirite speaks about analogy in many of his writings: *Metaphysics*, *Poetics*, *Politics*, *Prior Analytics*, *On Sophistical Refutations*, *Nicomachean Ethics*, *Protagoras*, etc.

In *Nicomachean Ethics*, Aristotle resumes the definition of analogy, insisting on the idea that within the reasoning by analogy, there are four terms:

“The just, then, is a species of the proportionate (proportion being not a property only of the kind of number which consists of abstract units, but of number in general). For proportion is equality of ratios,

<sup>2</sup> An example of such a textual figure in which analogy is involved is cited in Angela Bidu-Vrănceanu et al (2000) from Aristotle’s *Metaphysics*, Book II: “« For as **the eyes of bats** are to **the blaze of day**, so is **the reason in our soul** to **the things** which are by nature **most evident of all** »”. This could be summarized as follows: **A (the things most evident of all)** is to **B (the reason in our soul)** as **C (the blaze of day)** is to **D (the eyes of bats)**, i.e. **A : B = C : D**. (our translation) [9].

<sup>3</sup> „In early Greek thought analogies played a fundamental role in the expression of cosmological doctrines, in the development of natural science, and in ethical and political arguments” (Lloyd, *Analogy*)

and involves four terms at least (that discrete proportion involves four terms is plain, but so does continuous proportion, for it uses one term as two and mentions it twice; e.g. 'as the line A is to the line B, so is the line B to the line C'; the line B, then, has been mentioned twice, so that if the line B be assumed twice, the proportional terms will be four); and the just, too, involves at least four terms, and the ratio between one pair is the same as that between the other pair; for there is a similar distinction between the persons and between the things. As the term A, then, is to B, so will C be to D, and therefore, alternando, as A is to C, B will be to D. Therefore also the whole is in the same ratio to the whole; and this coupling the distribution effects, and, if the terms are so combined, effects justly. The conjunction, then, of the term A with C and of B with D is what is just in distribution, and this species of the just is intermediate, and the unjust is what violates the proportion; for the proportional is intermediate, and the just is proportional. (Mathematicians call this kind of proportion geometrical; for it is in geometrical proportion that it follows that the whole is to the whole as either part is to the corresponding part)" [10].

Speaking about the nature of Good, Aristotle also starts from analogy:

"The good, therefore, is not some common element answering to one Idea. But what then do we mean by the good? It is surely not like the things that only chance to have the same name. Are goods one, then, by being derived from one good or by all contributing to one good, or are they rather one by analogy? Certainly as sight is in the body, so is reason in the soul, and so on in other cases" [11].

In his *Poetics*, Aristotle defines analogy as a particular case of metaphor:

"Metaphor is the application of an alien name by transference either from genus to species, or from species to genus, or from species to species, or *by analogy, that is, proportion* [...]. *Analogy or proportion* is when the second term is to the first as the fourth to the third. We may then use the fourth for the second, or the second for the fourth. Sometimes too we qualify the metaphor by adding the term to which the proper word is relative. Thus the cup is to Dionysus as the shield to Ares. The cup may, therefore, be called 'the shield of Dionysus,' and the shield 'the cup of Ares.' Or, again, as old age is to life, so is evening to day. Evening may therefore be called, 'the old age of the day,' and old age, 'the evening of life,' or, in the phrase of Empedocles, 'life's setting sun.' For some of the terms of the proportion there is at times no word in existence; still the metaphor may be used. For instance, to scatter seed is called sowing: but the action of the sun in scattering his rays is nameless. Still this process bears to the sun the same relation as sowing to the seed. Hence the expression of the poet 'sowing the god-created light'" [12].

Regarding the applicability of reasoning by analogy, Aristotle admits that the analogy is not itself an instrument of logical reasoning, because you can not always infer true sentences by analogy. However, analogy can be undoubtedly an effective means of argumentation and persuasion. Aristotle recommends it in his work *On Sophistical Refutations* in order to obtain a general inductive reasoning: "In cases where there is no term to indicate the universal, still you should avail yourself of the resemblance of the particulars to suit your purpose; for resemblance often escapes detection" [13]<sup>4</sup>.

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<sup>4</sup> As Mircea Florian points out, in a note to Aristotle's *On Sophistical Refutations*: "We will resort to similarity, to 'analogy' in order to achieve a universal yet unknown and unnamed. Thus, for example, if the ox, sheep etc. do not have any teeth in the upper jaw, we might as well say that another animal resembling the previously mentioned, has no teeth either, which seemed not to be true if, instead of oral argumentation, we proceed to observe reality" [14].



Basically, references to analogy are very numerous in Aristotle's works, the great philosopher citing this phenomenon in both the logical and metaphysical problems and also in matters of anatomy, physics, politics, rhetoric, etc.<sup>5</sup>.

The direct involvement of the analogy phenomenon in grammar occurs with the famous controversy, held around the middle of the second century BC, between the *Analogists* and *Anomalists*. The subject of the dispute was to what extent language conforms to some rules.

"Broadly, the analogy – anomaly controversy turned on the extent to which orderliness and especially proportional regularity held sway in the Greek language, and by implication in language as a whole, and to what extent irregularities, 'anomalies' characterized it. The regularities looked for by the analogists were those of formal paradigms, wherein words of the same grammatical status had the same morphological terminations and accentual structure, and those involving the relations between form and meaning, whereby words that were comparable morphologically could be expected to bear comparable, 'analogical' meanings, and vice versa" [15]

The *Analogists*, through the voice of the Alexandrian philologists and grammarians, Aristophanes of Byzantium, Aristarchus, Dyonisius Thrax and Apollonius Dyscolos, stated that since language is a convention, a creation of people (θέσει - *thesei*), it is *analogous*, logically formed and as such, they dedicated their efforts to establishing some different models (*paradigma*) by reference to which the words of a language could be classified and grouped. The analogies "looked for" by the Alexandrians represent the basis for morphology, namely the establishment of the paradigms of different classes and subclasses of words (declensions and conjugations) as recurring patterns. Thus, as Dyonisius Thrax noted, the morphological component of grammar is generally concerned with "finding analogy" [16]<sup>6</sup>.

At the opposite side there stood the *Anomalists* (mainly from the philosophical school of the Stoics) who perceived language as a product of nature (φύσει - *physei*), therefore being only partly likely to be described in terms of some formative analogous models. They stated that language is anomalous, i.e. judging by the canons of logic, they concluded that language does not go with such patterns and that is why it must be accepted as such, with all its irregularities. Consequently, the Stoics admit the existence of exceptions, the unsystematic elements that can not simply be isolated from language, according to the grammarians' wishes. In support of this argument they emphasized the many cases of irregular words for the formation of which the analogous model was useless (see, for example, in Romanian, the opposition between the singular *om* "man, male" and the plural *oameni* "men, people", or the paradigm of the irregular verb *a fi* "to be" which presents almost eight variations of the radical), or the cases in which the form of the word is in contradiction with its meaning, that is the non-correspondence between the natural and grammatical gender (see, for example, in Romanian, nouns such as *catană* "soldier, recruit" or *beizadea* "prince; son of a ruler", which formally are feminine but refer to males, or the noun *slugă* "servant" which may refer both to the feminine and masculine genders). The Anomalists also highlight the error of a correspondence of the type *one form – one meaning*, showing that more often than not, as a result of some historical processes, one form of a word may have more referential functions. Even the existence of synonymy and homonymy was considered an annoying anomaly which might generate confusion in language.

<sup>5</sup> A detailed analysis of all forms of analogy in Aristotle's work is found in Leo Robin, *Aristotle*, Paris, PUF, 1944.

<sup>6</sup> Moreover, Dyonisius Thrax is the author of the most important grammatical study of Antiquity, entitled *Tékhnē grammatiké* (The Art of grammar), in which the theoretical and terminological foundations of the traditional descriptive grammar are laid. As a matter of fact, the model provided by this study influenced the entire European grammatical literature, beginning even with the Latin one [17].

The conclusion of Anomalists was that more attention should be paid to the language use than to its compliance with certain rules<sup>7</sup> [18].

The Stoic doctrines were later on resumed by the representatives of the School of Pergamum, who impressed by all kinds of exceptions found in all parts of the language, stated in their turn that language is not run by any rule (*analogy*), exceptions (*anomaly*) being far more numerous. The main representative of Anomalists was Crates of Mallus.

A few centuries earlier, in the *Cratylus* dialogue, Plato was the representative of the *Physei* theory, according to which words, by nature, need to have a meaning, that is they reflect reality either by their expressive origin or by their etymological structure<sup>8</sup>. On the contrary, his disciple Aristotle was the spokesman of the adverse theory, which stated that words have meaning by convention, agreement or consensus and no name appears naturally<sup>9</sup>.

In fact, the dispute between Analogists and Anomalists is much older, and may be traced back up to the Pre-Socratics. Thus, Eleatic philosophers denied any reality of the objects outside language, considering that both words and things are simple illusions, impressions unrelated to rational thinking. On the other hand, Heraclitus and his followers claimed that between words and the things they define there is an analogous relation, the language itself being but an *analogon* of reality, which establishes a natural link between names and things [20].

At the end of the discussion on the philological controversy between the Analogists and Anomalists, and also as a general conclusion on the main issues in philosophy of language in ancient Greece, we consider worth presenting Eugenio Coşeriu's point of view. The famous Tübingen Scholar considered the two theses, *thesei* and *physei*, the expression of intuition held by the ancient philosophers in connection with the two fundamental dimensions of language: the objective dimension and the intersubjective dimension, which, in turn, correspond to the two universals that define the essence of language: *semanticity* and *otherness*. Thus, φύσει thesis is nothing but the intuition behind the idea that language, or better said words, correspond to the essence or nature of things. This means that there is an *objective dimension of language*, that language corresponds to reality or being, and that every word makes – as Plato said – a "delimitation of the essence" of things [21]. The other theory (which is formulated as νόμῳ ἔθει even before Plato and which means "by usage", "according to customs / tradition" or "by convention"), represents the intuition of the *otherness* dimension, of language *intersubjectivity*, in the sense that every word (and, in fact, the language, in general) is common, not personal or individual. This is, in fact, the foundation of the *social dimension* of language, and, at the same time, of the human sociability, which can be rendered by "to be one with another" or "one with others". As far as its origins are concerned, human language presupposes the communication with someone, and it is even the community (cf. Lat. *communis* "common," "which belongs to several or all"; Lat. *communicare* "to make something available for everybody", "to share something with someone") that explains and justifies the *otherness of language*, which was later interpreted in the sense that language represents an institution or a social function. Language is the essential, primary form of human manifestation by means of which the speaker, as an empirical individual, reveals himself and opens to someone else whose humanity is thus recognized through communication [22].

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<sup>7</sup> The Analogists were purists, opponents of barbarisms and newly formed words, while the Anomalists considered these creations as the very manifestation of the essence of the language phenomenon, its spontaneity and vitality. The advantage of this latter view on the analogist one (with its fixed rules and immutable patterns) was the fact that language had been accepted as such, with all irregularities and "imperfections", implied and confirmed by the speech activity.

<sup>8</sup> Later on, within *The Seventh Letter*, Plato will tackle this point of view again, by declaring himself in favour of the *thesei* theory.

<sup>9</sup> The concordance between the analogical perspective on language and Aristotle's philosophical point of view can be easily demonstrated. The idea of proportion, ratio (Gr. *analogon*, *analogia*) appears in several places in his works as the guiding principle in both behaviour and thinking. Moreover, this was logically associated with the conventional view on language, which was adopted by Aristotle [19].



Therefore, as E. Coşeriu noted, the issue discussed by Plato in *Cratylus* (which will be further developed by the Stoics and the Alexandrians) is wrong<sup>10</sup>, as the real problem of the philosophy of language should not be "why do words have meanings?" and what the cause of this meaning is (if the cause is generated directly by things, nature of things, or if there exists an agreement or a convention among people to call certain things by certain words), but "what for?" "for what purpose?" words have meaning, which the function of the word is and when the word has meaning. It is necessary therefore to shift from the causal perspective to the finalist one. This change of perspective is first found with Aristotle (*De Interpretatione*) who demonstrates that no name is φύσει through its materiality, by its nature, but only when it is used to denominate something and then it becomes a symbol for that thing. And this relation between the name (as a material fact endowed with meaning) and thing is founded κατά συνθήκην "by setting up", "by what has been established" that is historically motivated, by tradition ("so they say ..."). Thus, the two dimensions of language – objective and intersubjective – necessarily appear together.

The justification for this unity will be later done by Humboldt, whose ideas are summarized by Coşeriu as: "Humboldt's idea, in short, is: undoubtedly, language animates things, but this dimension is, for the empirical subject [...] an objective dimension, that is these things occur in themselves and not connected to consciousness. But, within this solipsistic relation between an empirical individual and things, we are never sure that things are really objective [...]. Only by calling, you and I, the same things in the same way and understand what things we refer to, we are confident that things are objective, and not images or illusions of one's consciousness [...]. Intersubjectivity assures the objectivity of things [...]. These (*objectivity* and *intersubjectivity* – our remark, I.A.) are the two dimensions of language and, in fact, the philosophy of language is reduced to the development of these two dimensions" (our translation) [23].

### 3. The Latin Antiquity: the middle way to obtain order

The dispute between the Analogists and Anomalists will also reach Rome, where "the controversy" will not only be continued, but also commented on by the Latin grammarians, and, of these, we mention Varro (116-27 BC), a famous encyclopedist and man of letters, the first important author in Latin linguistics, who presents the dispute in three of the books of his work entitled *De lingua latina* (On the Latin language) one of the main sources of the details as regards the controversy between the Analogists and Anomalists). From his presentation, we can conclude that some irregularities and lexical exceptions confirmed through spoken language must be accepted, but the subject of concern of any grammarian must be the organization of language description so as to include in grammar rules (as generalizations) as much of the language as possible [24]:

"Many have raised the question whether in the inflections of words the art of speaking ought to follow the principle of unlikeness or that of likeness. This is important, since from these develop the two systems of relationship: that which develops from likeness is called Regularity, and its counterpart is called Anomaly. Of this, in the first book, I gave the arguments which are advanced in favour of considering unlikeness as the proper guide; in the second, those advanced to show that it is proper rather to prefer likeness. Therefore, as their foundations have not been laid by anyone, as should have been done, nor have their order and nature been set forth as the matter demands, I shall myself sketch an outline of the subject.

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<sup>10</sup> Coşeriu, however, lays emphasis on "intuition" as it is the basis of dialogue and is also essential to the philosophy of language. It undoubtedly refers to the intuition of two language dimensions – *objective* and *intersubjective* - which are closely connected.

I shall speak of four factors which limit the inflections of words: what likeness and unlikeness are; what the relationship is which they call logos; what "by comparative likeness" is, which they call "according to logos"; what usage is. The explanation of these matters will make clear the problems connected with Regularity and Anomaly: whence they come, what they are, of what sort they are" [25].

According to G. Mounin, Varro is a proponent of analogy [26], especially regarding the understanding of the structural functioning of the noun inflection and conjugation system:

„First as to their saying that the Regularities are not preserved in the tenses, when they give perfect *legi* 'I have read', present *lego* 'I read', future *legam* 'I shall read', and others in just the same way: they are wrong in finding fault with those forms like *legi* as denoting completed actions and the other two, *lego* and *legam*, as denoting action only begun; for the same verb which has been taken from the same kind and the same division, can be paraded through the tenses of non-completion, like *discebam* 'I was learning', *disco* 'I learn', *discam* 'I shall learn' and the same of completion, thus *didiceram* 'I had learned', *didici* 'I have learned', *didicero* 'I shall have learned'. From this one may know that the logical system of verbs is consistent with itself, but that those who try to speak the verbs in their three tenses, do this in an ignorant way [...]. Likewise they do ill to compare *fui* 'I was', *sum* 'I am', *ero* 'I shall be'; for *fui* is a form of completed time, whose series is consistent with itself in all its parts, as it should be, namely *fuera*, *fui*, *fuero*. Of the incomplete, that which is now pronounced *sum* used to be spoken *esum*, and the series is consistent in all its persons, because they used to say present *esum es est*, imperfect *eram eras erat*, future *ero eris erit*. In this same fashion you will see that the other verbs of this kind preserve the principle of Regularity" [27].

Thus, if anomaly represents the lack of regularity or of a rule (as in the interpretation given by Varro and other ancient authors<sup>11</sup>), analogy appears to be the expression of regularity. This role will be later denied to analogy, in the 19<sup>th</sup> century, within the studies of comparative grammar, when the phonetic laws were conceived as laws with no exceptions, whose action was sometimes hindered, however, by the intervention of analogy. We may therefore attribute Varro the debut of this oscillation which alternatively carried analogy from the area of order to the one of disorder, from one century to another.

Varro's observations will be resumed later on by other Latin authors, who will use the proposed classifications for the study of Latin, both enriching them and illustrating them. As an interesting detail, it seems that Julius Caesar himself would have written, while taking part in the war in Gaul, a treaty on analogy (*De analogia*) dedicated to Cicero, where he defined eloquence as "the choice of words" and adopted, on an uncompromising tone, for the sake of a pure, congruent writing, the principles expressed by the Analogists. Caesar followed the language usage which he considered a rule not only in terms of syntax, but also, primarily, for the selection of vocabulary, refusing the obsolete or archaic terms. His writing was not preserved, but it is cited by several Latin authors, including the oratorios Marcus Tullius Cicero (in *Brutus*) and M. Cornelius Fronto (in *De bello Parthico*) [28].

Analogy will be also analyzed by Quintilian, who, in *Institutio oratoria* (Institutes of Oratory) makes a very interesting remark as to analogy from the epistemological point of view. It can be considered, at the same time, the orator's critical remark addressed to those grammarians who abused the principle of analogy in order to introduce "rules" in language:

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<sup>11</sup> Thus, it is about the correct use of the grammatical forms, according to some view on what is right, normalized and standardized in language at a certain time, and the rejection of the aberrant forms, that no longer complied with the literary tradition. Basically, for the ancient grammarians, analogy shows its contribution when we talk about similar, formally related forms, that is when we will talk about *paradigm* in the modern era.

“But we must remember that the course of analogy cannot be traced through all the parts of speech, as it is in many cases at variance with itself [...]. Since analogy was not set down from heaven, when men were first made, to give them rules for speaking, but was discovered after men had begun to speak, and after it was observed how each word in speaking terminated. It is not therefore founded on reason, but on example; nor is it a law for speaking, but the mere result of observation; so that nothing but custom has been the origin of analogy” [29].

Therefore, Quintilian considers that analogy is merely a consequence of the functioning of the language system, which makes us not seek its origin in the human mind. However, this point of view will be later overturned by the authors of the rational grammars in the 17<sup>th</sup> century.

## References:

- [1] \*\*\* *Dicționarul limbii române / Dictionary of Romanian Language* (1913-1949), published by the Romanian Academy, *A – De and F – Lojnică*, Bucharest; original text: “s.f. raport, « asemănare » parțială, între două sau mai multe lucruri, împrejurări, situațiuni etc. « potrivă » cu privire la mărimea, forma, compoziția etc. a două lucruri, de altfel deosebite. (Gram.) Potrivirea unei vorbe sau a unei construcțiuni după alta cu care are vreo legătură în formă sau pe înțeles”.
- [2] \*\*\* *Encyclopédie philosophique universelle. L'univers philosophique* (1991). Paris: PUF (1<sup>ère</sup> éd. 1989), 80.
- [3] Euclid, *Elements*, Book V, available online at: <http://aleph0.clarku.edu/~djoyce/java/elements/bookV/bookV.html#props>
- [4] Plato, *Gorgias*, translated by Benjamin Jowett, available online at: <http://classics.mit.edu/Plato/gorgias.html>
- [5] Plato, *The Republic*, Book VI, translated by Benjamin Jowett, available online at: <http://classics.mit.edu/Plato/republic.7.vi.html>
- [6] Plato, *Timaeus*, translated by Benjamin Jowett, available online at: <http://classics.mit.edu/Plato/timaeus.html>
- [7] Ibidem.
- [8] See Angela Bidu-Vrănceanu et al (2000). *Lexic comun, lexic specializat / General Lexicon, Specialized Lexicon*, Bucharest: University of Bucharest Publishing House, 157 sqq;
- [9] Ibidem, 158; original text: „Așa cum *ochii liliacului* sunt orbiți de *lumina zilei*, tot așa *inteligenta noastră* este orbită de *lucrurile cele mai evidente* ». Această figură ar putea fi sintetizată astfel: **A** (*lucrurile cele mai evidente*) este pentru **B** (*inteligenta noastră*) așa cum (ceea ce) **C** (*lumina zilei*) este pentru **D** (*ochii liliacului*), adică **A : B = C : D**”.
- [10] Aristotle, *Nicomachean Ethics*, Book V, translated by W. D. Ross, available online at: <http://classics.mit.edu/Aristotle/nicomachaen.5.v.html>
- [11] Ibidem, Book I, available online at: <http://classics.mit.edu/Aristotle/nicomachaen.1.i.html>
- [12] Aristotle, *Poetics*, Section III, Part XXI, translated by S. H. Butcher, available online at: <http://classics.mit.edu/Aristotle/poetics.3.3.html>
- [13] Aristotle, *On Sophistical Refutations*, translated by W. A. Pickard-Cambridge, available online at: [http://classics.mit.edu/Aristotle/sophist\\_refut.2.2.html](http://classics.mit.edu/Aristotle/sophist_refut.2.2.html)
- [14] Aristotle, *On Sophistical Refutations*, in Aristotle (1998), *Organon*, volume II, translation, introductory study, introduction and notes by Mircea Florian, Bucharest: IRI Publishing House, 597 (note 247); original text: “Vom recurge la asemănare, la « analogie », pentru a obține un general necunoscut și nenumit până atunci. Așa, de exemplu, dacă boul, oaia etc. nu au dinți pe maxilarul superior, vom putea spune că și cutare alt animal, care se aseamănă cu cele de mai sus, nu are nici el dinți, ceea ce părea să nu fie adevărat, dacă, în loc de argumentare verbală, trecem la observarea realității”.
- [15] R.H. Robins (1997). *A short history of linguistics*. London: Longman, 4th edition, 26.
- [16] Ibidem.
- [17] See Eugen Munteanu (2005). *Introducere în lingvistică / Introduction to Linguistics*, Iași: Polirom, 55.
- [18] See John Lyons (1995). *Introducere în lingvistica teoretică / Introduction to Theoretical Linguistics*, Bucharest: Scientific Publishing House, 16-19, and Robins, op. cit, 26-27.
- [19] Cf. R.H. Robins, op. cit, 30-31.
- [20] Cf. Eugen Munteanu, op. cit, 47.
- [21] See Eugenio Coșeriu (2004). *Filozofia limbajului / Philosophy of Language*, in the volume *In memoriam Eugeniu Coșeriu*, edited by Nicolae Saramandu, Bucharest: Romanian Academy Publishing House, 75-76.
- [22] Ibidem, 74 - 76.
- [23] Ibidem, 84-85; original text: “Justificarea acestei unități o va face mai târziu Humboldt, ale cărui idei sunt rezumate de Coșeriu astfel: „Idea lui Humboldt, pe scurt, este următoarea: fără îndoială, limbajul conferă ființă lucrurilor, însă această dimensiune este, pentru subiectul empiric (...) o dimensiune obiectivă, adică aceste lucruri se prezintă ca fiind lucrurile înseși exterioare conștiinței. Însă, în acest raport solipsist al unui individ empiric cu lucrurile, nu avem niciodată siguranța că lucrurile sunt într-adevăr obiective (...). Numai prin faptul că numim, tu și eu, aceleași lucruri în același fel și înțelegem la ce lucruri ne referim, avem siguranța că lucrurile sunt obiective, că nu sunt imagini sau iluzii ale conștiinței mele (...). Intersubiectivitatea este garanția obiectivității lucrurilor (...). Acestea (*obiectivitatea și intersubiectivitatea*; our emphasis, I.A.) sunt cele două dimensiuni ale limbajului și, în realitate, la aceasta se reduce filozofia limbajului, la dezvoltarea acestor două dimensiuni”

[24] See R.H. Robins, op. cit., 56-58.

[25] Varro (1938), *De lingua latina / On The Latin Language*, with an English translation by Roland G. Kent, PhD, in two volumes, Cambridge, Massachusetts: Harvard University Press, London: William Heinemann Ltd, vol. II, Book X.1, 534; original text: „In verborum declinationibus disciplina loquendi dissimilitudinem an similitudinem sequi deberet, multi quaesierunt. Cum ab his ratio quae ab similitudine oriretur vocaretur analogia, reliqua pars appellaretur anomalia: de qua re primo libro quae dicerentur cur dissimilitudinem ducem haberi oporteret, dixi, secundo contra quae dicerentur, cur potius similitudinem conveniret praeponi: quarum rerum quod nec fundamenta, ut debuit, posita ab ullo neque ordo ac natura, ut res postulat, explicita, ipse eius rei formam exponam.

Dicam de quattuor rebus, quae continent declinationes verborum: quid sit simile ac dissimile, quid ratio quam appellant logon, quid pro portione quod dicunt ana logon, quid consuetudo; quae explicatae declarabunt analogiam et anomaliam, unde sit, quid sit, cuius modi sit”.

[26] But according to Eugen Munteanu, op. cit, 57, Varro is situated on a moderate and synthesizing position, between the analogist doctrine and the anomalist one, giving preference to usage (Latin *usus, consuetudo*) as to the acceptance or rejection of certain forms, be it regular or anomalous

[26] Varro, op. cit, IX.96 and 100, 516-518; original text: „Primum quod aiunt analogias non servari in temporibus, cum dicant legi lego legam et sic similiter alia: nam quae sint ut legi rem perfectam significare, duo reliqua lego et legam inchoatam, iniuria reprehendunt: nam ex eodem genere et ex divisione idem verbum, quod sumptum est, per tempora traduci infecti potest, ut disceram disco discam, et eadem perfecti, ut didiceram didici didicero. Ex quo licet scire verborum rationem constare, sed eos, qui trium temporum verba pronuntiare velint, insciant id facere [...]. Item male conferunt fui sum ero, quod fui est perfectum, cuius series sibi, ut debet, in omnibus partibus constat, quod est fueram fui fuero; de infectis sum quod nunc dicitur olim dicebatur esum et in omnibus personis constabat, quod dicebatur esum es est, eram eras erat, ero eris erit; sic huiusce modi cetera servare analogiam videbis”.

[28] See G.L. Hendrickson (1906). *The De Analogia of Julius Caesar - Its Occasion, Nature and Date with Additional Fragments*, in „Classical Philology”, vol. 12, 97-120, and Robinson Ellis (1904). *The correspondence of Fronto and M. Aurelius*. A lecture delivered in the Hall of Corpus Christi College, Oxford, December 3, 1903, London: Oxford University Press (available online at: <http://archive.org/details/correspondenceof00elliiala>).

[29] M. F. Quintilian, *Institutes of Oratory or Education of an Orator* (1903), in twelve books, translated with notes by the Rev. John Selby Watson, vol. I, London: George Bell and Sons, Book I, Chapter VI, § 12, § 16; original text: „Sed meminimus non per omnia duci analogiae posse rationem, cum et sibi ipsa plurimis in locis repugnet [...]”. “Non enim, cum primum fingerentur homines, Analogia demissa caelo formam loquendi dedit, sed inventa est postquam loquebantur, et notatum in sermone quid quoque modo caderet. Itaque non ratione nititur sed exemplo, nec lex est loquendi sed observatio, ut ipsam analogian nulla res alia fecerit quam consuetudo”.